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Résumé de l'article

This study examined the relationship between corporate governance attributes, firm-specific characteristics, and financing decisions of listed firms in Ghana using panel data for a nine-year time frame spanning 2011 to 2019. The study adopted multivariate regression analysis using Prais-Winsten regression, correlated panels corrected standard errors (PCSEs). The findings show that corporate board structures in Ghana play a significant role in influencing the financing decisions of listed firms on the Ghana Stock Exchange. Specifically, corporate boards with bigger sizes and more female representation prefer more debt financing of their assets. Also, the findings provide support for the Pecking Order Theory and identifiable firm-specific determinants of financing decision of listed firms. The evidence provided by this study is robust to alternative estimators. The outcome of this study further provides strong policy support for enforcing proper corporate governance features and gender diversity dimensions for corporations in Ghana.

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This study examined the relationship between corporate governance attributes, firm-specific characteristics, and financing decisions of listed firms in Ghana using panel data for a nine-year time frame spanning 2011 to 2019. The study adopted multivariate regression analysis using Prais-Winsten regression, correlated panels corrected standard errors (PCSEs). The findings show that corporate board structures in Ghana play a significant role in influencing the financing decisions of listed firms on the Ghana Stock Exchange. Specifically, corporate boards with bigger sizes and more female representation prefer more debt financing of their assets. Also, the findings provide support for the Pecking Order Theory and identifiable firm-specific determinants of financing decision of listed firms. The evidence provided by this study is robust to alternative estimators. The outcome of this study further provides strong policy support for enforcing proper corporate governance features and gender diversity dimensions for corporations in Ghana.

Key words: Corporate governance, capital structure, gender diversity, Ghana.

Introduction

Corporate governance continues to generate deep discourse in both the corporate and academic spheres owing to the implications of bad corporate governance practices on firm performance. Anecdotal evidence points to a negative implications of weak corporate governance systems on corporate failures (Aebi, Sabato & Schmid, 2012). Corporate governance is a term used to describe general frameworks put in place by a company to ensure efficient use of resources, promote responsible management behaviour, regulate the use of power and enhance faithful stewardship (Nkundabanyanga, et al 2013; Noriza, 2010; OECD, 2015). Good corporate governance promotes accountability connections between the various business players, which may improve company performance. Where there is better corporate governance practice, firm

managers are not only accountable to shareholders and management but also lenders of funds as well (Berger et al., 1997; Faccio, Lang, & Young, 2010). A firm that exhibits good corporate governance characteristics is most likely to provide a good return on shareholders' invested capital and could attract more funding from the financial market as well.

Also, empirical evidence points to the fact that corporate governance elements do exert a considerable impact on the capital-mix choices of corporations (Berger et al., 1997; Faccio, Lang, & Young, 2010). Notable corporate governance elements identified in extant literature include conflicts of interest among top management and owners, managerial award structures, schemes designed to regulate stockholders' actions, and firm fundamental governance principles. Hence, financing decisions are a product of protecting as well as combining the expectations of major stakeholders, such as controlling stockholders, non-controlling owners, management, and debtholders, by establishing and implementing strong governance mechanisms that seek the interests of all stakeholders fairly.

Therefore, Friend and Lang (1988) explained that managers holding more equity in a firm might opt for less debt funding in order to mitigate the non-diversifiable firm -specific risk. Furthermore, using higher debt results in higher agency costs for management rather than public investors. In the event of a firm using more debt capital, Brailsford et al, (2002); Berger et al, (1997) indicated that supervision by external block-holders and non-executive board membership are some of the measures of corporate control that could be enforced.

In Ghana, corporate governance issues have gained prominent attention, especially with the collapse of financial institutions between 2017 and 2019. In the year 2000, a study conducted by the Institute of Directors (IOD) using the top 100 companies showed that corporate governance practices have gained significant attention in Ghana. Furthermore, several important amendments to the Companies Act, 1963 (Act 179) that gave birth to the Companies Act, 2019 (Act 992) saw significant improvement in the directors' duties in ensuring proper and standard corporate governance practices that meet the challenges of the 21st century. The key motivation that informed the amendments to the old Act 179 was in part due to huge lapses in the corporate governance framework exemplified by opportunistic and reckless director behaviour, which have been identified as part of the causes of insolvencies among financial institutions in Ghana between 2017 and 2019.

While admitting that the association between corporate governance, firm characteristics, and capital structure has been largely explored in developed economies, scholars like Wen et al. (2002) and Abor (2007) hold the view that empirical research on corporate capital structure, corporate governance, and firm characteristics in emerging economies is still at a nascent stages especially in Asia and Sub-Saharan Africa. In Ghana, limited studies (Abor and Nicholas Biekpe, 2012; Kyereboah-Coleman et al. 2006) explored the role of governance structures in corporate finance and performance of firms registered on the Ghana Stock Exchange.

This study intends to expand the existing literature in the light of developments that transpired between the years 2017 and 2019 in the Ghanaian financial system by examining the relationship between corporate governance, firm characteristics, and capital structure decisions of listed entities on the Ghana Stock Exchange (GSE) during the period of 2011-2019. The developments during this period affected some of the listed firms, such as UT bank, that was delisted on the GSE in 2017. The rest of the paper is organized as follows: Section two is

dedicated to the theoretical framework, section three focuses on the hypotheses and section four is devoted to data, econometric model specification, and estimation techniques. Section five captures the results and discussions, and section six concludes the paper with policy implications.

Theoretical framework

The irrelevancy of the capital structure proposition by Modigliani and Miller (1958) provided the basis upon which all theoretical debate about a firm's capital structure takes inspiration. The Modigliani and Miller (1958) capital structure theory claimed that a corporation's worth is not affected by the capital structure strategy its managers embrace. The theory best fits a perfect capital market with strict assumptions, which includes zero tax, zero business cost, zero bankruptcy cost and the nonexistence of asymmetrical information. Thus, in a real market situation, if managers devote significant time to determining the ideal financing mix, the assumptions of Miller-Modigliani will not suffice. Modigliani and Miller (1963) subsequently reviewed this theory by introducing the tax advantage on financing mix and economic enterprise worth. Subsequently, new theories were developed to demonstrate the importance of capital structure as a determinant of shareholders' wealth. Each theory, however, offers a plausible rationale for ascertaining the likely factors of the capital structure.

The Trade-off Theory

According to Kraus and Litzenberger (1973), the trade-off theory predicts that a firm selects its perfect financing mix through harmonizing the tax advantage derived from borrowing alongside the insolvency cost of borrowing. Barnea et al. (1980), also explained that firms encountering tax exposure ought to improve their capital structure until the extra value from tax protection is equalized by the current value of the likely cost of bankruptcy. The theory emphasizes the existence of a targeted financing mix that optimizes a corporation's value. Hence, a little deviation away from that marked target requires correction.

The Pecking Order Theory

The pecking order theory finds its roots in the concept of asymmetric information as a basis for which an optimum capital mix can be achieved. Myers and Majluf (1984) are credited as the main proponents of the pecking order theory. Myers and Majluf (1984) believed that the existence of informational gap between internal stakeholders of a firm and external providers of funds causes the cost of capital to vary across diverse sources of finance. Internal actors, for example, have good knowledge about the prospects of the company compared to potential equity investors. The existing shareholders will therefore demand a greater return in the form of higher share price from prospects interested in owning part of the firm. Consequently, issuing new shares will be more expensive for the company compared to funds solicited internally. A similar case can be made for internal financing options versus external debt acquisition. Thus, the pecking order suggests that there is a hierarchy of business preferences in terms of funding corporate projects; companies, from the onset, will rely on internally generated and retained sources of income to fund their operations.

Also, if more funding is required, and based on favorable informational gaps and good corporate governance practices, the firm may resort to issuing debt securities. Finally, as a last resort, firms may opt to sell fresh equity shares to make up for outstanding funding gaps. The

relative expenses of various financing solutions are reflected in the order of preferences. Clearly, corporations would prefer internal sources of funding over costly external financing (Myers and Majluf, 1984). Thus, the pecking order hypothesis predicts that organizations that are profitable and thus generate high earnings will employ lesser loan capital than firms that do not generate high earnings.

According to Donaldson (1991), managers will typically turn to internal sources of funding rather than issue shares. This theory is based on the hypothesis that managers of economic enterprises have superior knowledge of their firms' current performance, development potential, and risk exposure than external parties (Brealey et al., 2006). Firms should consequently finance their real assets through internal money (such as surplus earnings), debt, and equity, in that order. Thus, we can hypothesize, according to the Pecking order theory, that the profitability of a firm impacts its financing decision.

Agency Theory

According to the agency theory by Jensen and Meckling (1976), managerial behaviours may deviate from those required to maximize shareholder profits. According to Jensen and Meckling (1976), the owners (principals) and managers (agents) suffer an agency loss, that is, the extent to which returns to residual claimants (owners) fall below what they would be if the principals exercised direct control over the organization. This direct control extends to corporate governance measures. Even though managers are hired and granted authority to operate the firm in the interest of shareholders, managers may be primarily concerned with achieving their own goals. The goal of management may thus differ from maximizing the value of the business, borne from optimizing and sustaining business profitability. As a result, managers will behave in their own self-interest in order to obtain higher pay, benefits, job stability, and, in some situations, direct exploitation of the firm's cash flows.

Furthermore, Eriotis et al. (2007) claim that managers have acquired the ability to administer the firm, but the owners may only try to discourage any value transfers by monitoring and control, such as independent director supervision. Nonetheless, monitoring and control operations necessitate agency expenditures. On the other hand, perfect control, on the other hand, is incredibly expensive. Shareholders should seek methods that do not extract enormous quantities of value from the corporation while also monitoring and controlling management operations. The implication of agency theory is that managers should be given the ability to operate the organization through effective corporate governance systems such as supervision, board control, and monitoring by independent directors, while emphasizing financial transparency and information disclosure.

Resource Dependency Theory

The resource dependence theory by Pfeffer (1973) highlights the significance of good corporate governance and specifically indicates the influence of outside board members as necessary board characteristics to reinforce entities' capacity to safeguard against external hostilities, reduce uncertainty, and promote the acquisition of resources that not only enhance the efforts of firms in the capital market but also magnify the reputation of the firm. External membership on boards is associated with more leveraged status (Jensen, 1986; Berger et al., 1997; Abor, 2007). This means that companies with large leverage are assumed to have a higher percentage of external directors, whereas entities having a low ratio of external board membership have

relatively low debt usage in their capital mix. In contrast, Wen et al. (2002) showed that the number of external board members has a significantly negative connection with leverage. They contend that outside directors closely supervise managers, causing these managers to use less leverage to get better performance results. This implies organizations with a higher share of outside directors are more likely to pursue minimal financial leverage with a high market value of equity.

Hypotheses

Based on the agency and resource dependency theories, existing studies provide substantial proof to show that corporate governance structures can impact a firm's capital structure. Corporate governance characteristics mostly investigated in the literature are: independence of the board, size of the board and gender diversity of the board. This section of the study provides hypotheses suitable for the expected relationship between the variables.

Board Independence

A company's board of directors is the highest authority in charge of creating strategic decisions for management to implement. The number of inside directors versus outside directors on a board indicates its independence. An outside director is a board member who is not involved in the company's day-to-day operations but is involved in making strategic decisions for the company's implementation. As a result, external board members are not permitted to serve in any other capacity in the company other than that of director. According to the GSE listing rules and guidelines, the total board members must include at least half of the non-executive directors. Again, a quarter of the total board membership must be identified as independent. Board independence is also referred to in the literature as board composition. From the perspective of the classical agency theory, the higher the number of outside directors on a corporate's board of directors, the better and well-protected the firm will be against uncertainties such as issues of bankruptcy. Also, a higher number of outside directors on a firm's board show to a large extent, a strong demonstration and commitment towards transparency and accountability, which are favourable ingredients for attracting needed funding from the financial market (Chen & Hsu, 2009). In that way, Ahmed and Wang (2012) explain that the critical role of outside directors on a corporate board is to carry out effective monitoring and evaluation of managers' actions via appropriate corporate governance rules. Another advantage of an outsider-dominated board is that the possibility of meeting the valid concerns of most of the firm's stakeholders is higher in outsider-dominated firms than in firms dominated by a smaller number of outsiders.

Existing research on board composition and its effect on the capital structure has shown conflicting results. Boubakari et al. (2010) discovered that when the board is dominated by inside directors (members of the shareholders' family), family enterprises avoid debts and the opening of firm capital in a family business. They also found a positive association between the number of independent directors on the board of directors and the level of debt in family businesses. They explained that when an independent director is present, family businesses are willing to source equity finance. Existing research in the Ghanaian financial market found evidence of a positive relationship between board independence and capital structure. In the study of Abor (2007), board independence has a positive and statistically significant association with capital mix, whereas in the view of Bokpin and Arko (2009), a positive relationship

between board independence and financing mix exists but the relationship was not statistically significant. Furthermore, AlNodel and Hussainey (2010) showed that the presence of a non-executive director is significant and positively associated with a total capital ratio as well as the long-term debt ratio. Berger et al.'s (1997) study also found a positive link between capital and board members from outside the company.

Existing studies (Anderson et al., 2004; Wen et al., 2002), on the other hand, discovered an inverse association between board independence and capital structure, except for Vakilifard et al., (2011), who established the existence of no association between level of external board membership and capital mix. Based on the above evidence, we provide the following hypothesis:

H_{a1}: *The impact of board independence on the capital structure is largely indeterminate.*

Board Size

According to Bokpin and Arko (2009), board size can be defined as the number of personnel that make up a company's governing board as at the date of reporting. They oversee making strategic decisions that will secure the firm's long-term success and maximize the wealth of its owners. The minimum number of directors on corporate boards in Ghana is two (2), according to the compliance governance codified in Act 179 (1963), whereas the Security and Exchange Commission (SEC) in Ghana advocates board membership ranging from eight (8) to sixteen (16) personnel. The size of a corporate board is critical in the determination of the effectiveness of strategic decision making in a firm. Following from the viewpoint of the agency theory, a large number of members on a corporate's board are likely to reduce the agency cost due to the varied skills, including monitoring ability. In the eyes of lenders, large corporate boards are regarded as effective monitoring mechanism that can enforce standard corporate governance practices that can minimize agency conflicts and information asymmetry. Along the same line of reasoning, a larger board size has the advantage of making a firm enjoy a lower cost of debt financing from lenders.

According to prior empirical investigations, the link between the size of a corporate board and the financing decisions of firms, largely seems to point to a positive relationship. For instance, Abor (2007) found a positive relationship between board size and financing decisions. Similarly, Bokpin and Arko (2009) observed a positive link between the size of the board and both long-term and short-term debt ratios. However, Bokpin and Arko (2009) found a negative relationship between board size and debt ratio. AlNodel and Hussainey (2010) reported that board size affects overall debt levels as well as long-run debt levels of listed enterprises on the Saudi bourse. Kajananthan (2012) equally discovered a direct link between the size of the board and leverage for corporations in the manufacturing sector, in Sri Lanka.

Also, Wen et al. (2002) found a positive association between board size and capital mix. Moreover, the work of Kyereboah-Coleman and Biekpe (2006) showed a positive relationship between board size and overall debt ratio and short-term debt ratio for corporations registered on the Nairobi stock exchange. The positive association is an indication that entities with a larger board membership have the tendency to pursue high debt financing strategies in order to boost the company's worth.

On the other hand, Vakilifard et al. (2011), discovered a negative link between board size and leverage for listed companies in Iran and Indonesia, respectively. An inverse link between board size and the cost incurred in contracting debt was revealed by Anderson et., (2004). According to Anderson et al. (2004), for every addition to the board of directors, the cost of debt declined by 10 basis points. Similarly, Berger et al. (1997) concluded that there was an inverse relationship between board size and the choice of financing. Nonetheless, Wiwattanakantang (1999), reported no significant relationship between the choice of finance and the size of the board. Large boards, intuitively, are expected to pool their skills to make efficient and effective choices for the benefit of the company. Though larger boards may have difficulty reaching consensus, a corporation with stronger governance mechanisms should not face such a setback. Thus, we formulate the following hypothesis:

H_{a2}: Board size has an impact on the capital structure of a firm.

Board Gender Diversity

The number of female board members on a corporate board has attracted the attention of policymakers and academics as well. Helfat et al. (2006) and Viinicombe at al. (2008) identified a growing trend in the enlistment of women into corporate board positions over the past decade. This underscores an important role that board gender diversity in terms of women's representation on corporate boards brings into boardroom decision making. Academic research has focused on the impact of a female board member on corporate decision making (Nielsen & Huse, 2010), risk-taking (Faccio et al., 2016), managing (Loden, 1985), firm performance (Harel et al., 2003), firm value enhancement (Carter et al., 2003), and transparency and disclosure (Adams & Ferreira, 2009). Nielsen and Huse (2010) added that women directors on corporate boards play an influential role in the board's decision making by means of their professional expertise and different value systems. From a purely theoretical angle, diversity of corporate board membership could enhance decision-making due to the logic that, diverse group may possess a pool of varied talents and skills, abilities and knowledge, which can lead to effective corporate decision-making for better results (Williams & O'Reilly, 1998). Thus, according to decision-making theorists (Hoffman & Meier, 1961), group diversity enhances group creativity. However, the social identification and social categorization proponents (Tajfel, 1981; Turner, 1987) argue that group diversity may influence dynamics and performance negatively.

Given the aforementioned theoretical propositions, Nielsen and Huse (2010) identified two types of characteristics (non-traditional professional experience and value systems) through which women directors can influence corporate boardroom decision-making and thus have meaningful impacts. In terms of women's participation in decision-making positions, board gender diversity enriches board decision-making, quality of ideas, and examination of different aspects of the same issue by providing varied alternatives for consideration. In terms of value systems, the gender diversity proponents (Schubent, 2006) argue that males are more adventurous and risk-loving, whereas females are more risk-averse. By logical extension, female directors are more likely to make low-risk financing decisions and show high avoidance of debt financing than male directors. Accordingly, Schicks (2014) found that women have less over-indebtedness risk than their male counterparts.

Many economists believe that equitable representation of female directors on the board of governors is a positive development because a gender-diverse board is said to reduce managerial opportunism and bridge knowledge and informational gaps. Consequently, a well-diversed board is expected to resort to the use of a more conservative debt level to finance a firm while optimizing returns to equity holders (Usman et al., 2020a). The proportion of female directors on the board is normally used to calculate gender diversity (Fuente et al., 2017). Thus, we provide the following hypothesis:

H_{a3}: Board gender diversity has an impact on a firm's capital structure.

Empirical evidence on firm capital structure has identified some firm-related characteristics, that can influence the source of funding for corporations, both big and small. Notable among them are the firm's age, size, asset structure, growth, and profitability (Abor & Biekpe, 2012). Titman & Wessels (1988) recognize non-debt tax shield, industry classification, and earnings volatility as capital structure attributes. According to Titman and Wessels (1988), a country's financial market can also influence the capital structure of firms. Furthermore, Chen et al. (2009) identified investment type, informational gap, control, growth, and shareholding framework as determinants of financing decision of enterprises. Again, Abor and Biekpe (2012) cited collateral availability as a factor of concern in determining the desired capital mix.

Asset Tangibility

The relevance of asset structure (herein referred to as asset tangibility) has long been noticed in the financial literature due to its liquidity to a firm's value. Firms with more tangible assets in the share of their asset structure are of high liquidation value due to the fact that tangible assets are used as collateral for financing (Harris & Raviv,1991). Firms with a high amount of tangible assets have a higher liquidation value than firms with a high amount of intangible assets in the event of financial bankruptcy. Accordingly, firms with a high level of tangible assets can increase their debt financing more than those with a high level of intangible assets. Furthermore, based on the agency theory, which was supported by Rajan and Zingales (1995), collateralizing tangible assets for debt financing minimizes agency costs connected to debt finance, which ultimately affect the lender and consequently increases debt finance. This line of reasoning is consistent with the pecking order theory of debt finance too, in that firms with a high value of tangible assets that can be used as collateral will prioritize debt financing first before equity finance.

From the foregoing discussion, the agency theory and pecking order both explain the relevance of asset structure (the share of tangible assets in total assets) as a determinant of capital structure. According to agency theory, firms with a high amount of tangible assets in their asset structure, acting as collateral for debt financing, have a better chance of reducing creditor agency costs and increasing debt finance. The pecking order theory, on the other hand, explains why firms with a low amount of tangible assets as collateral have high agency costs such as monitoring capital expenses, particularly for managers who value perquisites more. Thus, theoretically, tangibility has a positive relationship with a firm's financing decision (Stulz, 1990). According to Stulz (1990), organizations with large intangible assets face higher capital expenses because managing such assets is difficult. Furthermore, since firms use assets to collateralize loans, firms with large tangible assets are more likely to get loans on favourable

conditions from creditors. Thus, firms with massive tangible assets are more likely to borrow more.

A large body of empirical evidence shows that asset structure, is a determinant of capital structure but there is no consensus on the relationship between tangibility and capital structure. Frank and Goyal (2003), Akhtar (2005), Chen (2004), Huang and Song (2006) found a positive association between asset tangibility and leverage, while Grossman and Hart (1982), Bauer (2004), and Mazur (2007) found a negative correlation between a firm's asset tangibility and capital structure. Thus, we hypothesize that:

H_{a4}: *A firm's asset tangibility impacts its capital structure.*

Profitability

One of the key indicators of the capital structure identified by scholars is profitability. Ross (1977) proposed the signaling theory that holds that firms use profitability, among other indicators, to communicate creditworthiness to financial market participants. Thus, more profitable firms are expected to increase their debt financing levels due to the fact that profitable firms are likely to have lower bankruptcy risk, which signals good news to creditors. The trade-off theory's position with respect to the nexus between profitability and capital structure is consistent with the signaling theory. The traditional trade-off theory envisions a positive relationship between profitability and debt financing because firms with large profits should take on extra debt to protect their earnings. On the contrary, the pecking order theory posits that profitable firms are expected to use less debt financing. According to the pecking order theory, because organizations prefer to employ internally generated sources of capital first, management will only consider debt once they have exhausted retained earnings. This implies that enterprises with strong profit margins will lessen their desire for debt financing.

Both the trade-off theory (TOT) and the pecking order theory (POP) have found empirical support. The existing studies such as Chiang et al. (2010), Reinhard and Li (2010), Jordan et al. (1998), and Margaritis and Psillaki (2007) found a positive association between a firm's profitability and its debt ratios, which is consistent with the TOT. With respect to the POT, Rajan and Zingales (1995) found an inverse relationship between a firm's leverage and its profitability similar to existing evidence (Barton et al., 1989; Van der Wijst & Thurik, 1993; Chittenden et al., 1996; Jordan et al., 1998; Cassar & Holmes, 2003, Esperança et al., 2003; Hall et al., 2004). Moreover, Fama and French (2002) concluded that profitable firms have lower debt ratios. Abor (2005) indicated that the profitability of a firm is negatively associated with long-term its debt ratio but positively associated with its short-term debt ratio.

Nonetheless, other scholars did not find any statistically significant relationship between a firm's profitability and capital structure (Hovakimian et al., 2004; El-Sayed Ebaid, 2009). For instance, evidence provided by Al-Sakra (2001) indicates that in the industrial sector, there is no statistically significant relationship between debt ratio and profitability of firms. Based on the evidence from the literature, we thus provide the following hypothesis:

H_{a5}: *A firm's profitability impacts its capital structure.*

Firm size

A firm's size confirms advantages and disadvantages for its survival. Large firms are regarded as stable and less likely to fail compared to smaller firms. Also, large firms are more likely to enjoy economies of scale, diversified business opportunities, and acquire goodwill from the financial market than smaller firms. Also, unlike small-sized businesses, large-sized firms are more stable and are less likely to go into bankruptcy, which is essential for attracting funding from the financial market. Thus, small and medium-scale firms are noted to have financing as one of their key challenges to expansion.

From the theoretical perspective, the trade-off theory suggests that large firms are likely to employ more debt financing than smaller firms based on the diversified business nature of large firms as well as the stability in their earnings. Large firms may also have more growth opportunities, which may necessitate expansion and thus require external debt financing, than smaller firms. Therefore, from the view of the trade-off theory, there is a positive relationship between size and the debt borrowing. This is due to the fact that large organizations tend to diversify their economic activities, which reduces the danger of insolvency while providing predictable cashflow, allowing large companies to borrow more (Frank and Goval, 2009; Jong et al., 2008). Existing scholars have confirmed the positive association between capital structure and the size of a firm (Al-Fayoumi & Abuzayed, 2009; Yu & Aquino, 2009; Du & Dai, 2005; Eriotis et al., 2007; Huang & Song, 2006; Ezeoha, 2011; Bae, 2009; Hovakimian et al., 2004; Agrawal & Nagarajan, 1990).

On the contrary, the pecking order theory considers an inverse relationship between size and debt financing to exist. In the view of the pecking order theory, larger organizations typically face complicated problems, which may increase the cost of information asymmetry (Rajan and Zingales, 1995). Relying on the pecking order, borrowing should be used only as a last resort when determining a firm's ideal capital structure. As a result, there is an inverse relationship between firm size and debt finance. Cassar and Holmes (2003), Esperança et al. (2003), and Hall et al. (2004) discovered that long-run debt-equity levels exert a significant and positive link with firm size. However, the researchers found that the short-run debt-equity level is indirectly related to the size of the firm. Titman and Wessels (1988) opined those small enterprises resort to the use of short-term funding relative to large enterprises because the cost of securing long-term funding is much more expensive for the balance sheets of small firms. However, Karadeniz et al. (2009), found no statistically significant relationship between the debt ratio and the size of a firm. Based on the evidence above, we hypothesize that:

H_{a6}: *A firm's size affects its capital structure.*

Asset Growth

Firms that have identified growth opportunities are expected to take advantage of those opportunities. Taking advantage of such an opportunity may require financing from the internal resources of the firm or borrowing from the financial market, especially when the internal financing sources are inadequate. By this reasoning, firms with asset growth are expected to rely more on debt financing or less on debt. Rajan and Zingales (1995) were of the view that firms that possess growth opportunities use less of debt in their future financing decisions but more equity. Theoretical perspectives also offer some insights.

According to the pecking order theory, corporations possessing high growth prospects are characterized by profitable investment alternatives, which can increase the risk profile of these firms. Since firms with high-risk profiles attract high borrowing costs, internal sources of funds are mostly preferred, hence an inverse association between growth and leverage is expected. The inverse relationship between growth opportunity and capital structure posited by the pecking order theory finds support in the empirical works of Ooi (1999) and Huang and Song (2006). In support of the pecking order theory, Berens and Cuny (1995) expressed their view that firms with growth opportunities may rely more on equity finance and less on debt finance and will therefore create low leverage.

In contrast, the trade-off theory envisages a positive association because firms with high growth potential cannot persistently depend on internal funds as the only form of raising capital even in the face of higher bankruptcy costs (Fama and French, 2002). The empirical findings in support of these theories appear inconclusive. Some researchers discovered a direct relationship between growth and borrowing (Kester, 1986; Titman and Wessels, 1988; Barton et al., 1989), whereas others concluded that firms with high growth potential borrow less (Stulz, 1990; Rajan and Zingales, 1995; Roden and Lewellen, 1995; Al-Sakran, 2001). Long-term debt borrowing was discovered by Michaelas et al. (1999) to be positively related to future growth. Also, Hall et al. (2004) discovered that both long-term borrowing and short-term borrowing impact firm growth favourably. Based on the above, we provide the following hypothesis:

H_{a7}: A firm's asset growth has an influence on its capital structure.

Age of the firm

The age of a firm is considered in capital structure models as a key determinant of an optimum capital level. Old age connotes firm stability and sustainability. Businesses that are tried and tested through time demonstrate the capacity to operate in the foreseeable future, increasing their image to meet debt obligations as and when they fall due. Therefore, the age of a firm can affect the cost and availability of external funding. For instance, "young" or start-up firms are normally considered fragile, unstable, and characterized by a lot of risk and information asymmetry. Thus, the cost of debt finance to these young firms is likely to be high, and this can limit their accessibility to debt finance. Again, these start-ups have limited international sources of equity finance and, thus, more reliance on debt financing becomes the best alternative (Beck & Demirguc-Kunt, 2006). However, matured firms are likely to build up a lot of internal financial reserves and establish good relationships with lenders.

Theoretical perspectives on the relationship between age and capital structure provide inconclusive insight. According to the agency cost and trade-off theories, firms that have been in business for a long time and have a good reputation with lenders may have better access to finance at a lower cost than start-ups, and thus the relationship between a firm's age and capital structure is expected to be positive (Sakai et al., 2010). However, the pecking order theory holds that matured firms have more financial reserves internally and they may not be too interested in debt financing from lenders.

Empirical evidence confirms both the pecking order theory as well as the trade-off and agency cost theories. Petersen and Rajan (1994) explain that younger entities will be more inclined to

pursue low a debt profile because the quality and strength of these firms are yet to be tested over time. Esperança et al. (2003) revealed an inverse relationship between the age of a firm and its long-term and short-term borrowing. A study conducted by Green, Murinde, and Suppakitjarak (2002) also discovered a negative link between age and the likelihood of securing debt capital for a startup company. Hall et al. (2004), however, identified a positive relationship between a firm's age and long-term debt. Based on the empirical evidence above, we provide the following hypothesis:

H_{a8}: A firm's age affects its capital structure.

Audit reputation

According to Bharath et al. (2009), organizations with high amounts of asymmetric information have a high possibility to opting for borrowing to fund their operations instead of issuing fresh shares. Additionally, Bharath et al. (2009) provided evidence that asymmetric information affects corporate capital structure decisions made by US corporations. Furthermore, the findings of Abad et al. (2017) suggest that when financial statements are audited by one of the top four corporations, information asymmetry between managers and investors is reduced, and investors can expect higher future earnings on the stock exchange. As a result, there appears to be a direct association between audit reputation and capital structure. The audit reputation (AUDR) of a firm is measured in this study using a dummy variable coded 1 if the firm is audited by any of the top four international audit firms (Pricewaterhousecooper, Delloite & Touche, Ernst & Young, and KPMG) and coded 0 otherwise. Thus, we provide the following hypothesis:

H_{a9}: A firm's audit reputation influences its capital structure.

Data, Model Specification, and Estimation Techniques

Sources and types of data

The study employed panel data for twenty-four (24) sampled firms listed on the Ghana Stock Exchange from 2011 to 2019, mainly due to relevant data availability. These firms operate in all of Ghana's important economic sectors, including financial services, manufacturing, technology, agriculture, and health care. The study relied on secondary data taken from two key sources: corporate annual reports released by corporations and available online, as well as the well-known Osiris database, 2020. The corporate governance elements of the listed firms were derived from corporate annual reports, while firm specific features and capital structure variables were derived from data retrieved from the Osiris database.

Variable definition and measurement

Dependent variable: Capital Structure

The capital structure is the dependent variable in this study with proxy CAP. To calculate a firm's capital structure, this study used the definition given by Chow et al. (2018) as the ratio of total debt to total assets in book values. Prior research, most notably by Graham and Harvey

(2001), revealed that managers prioritize target capital structure ratios based on book values. Myers (1977) agrees, arguing that the book value ratio is more useful since it is not skewed by market expectations, which are uncertain and volatile over time.

Independent variables

The independent variables include board characteristics as well as firm-specific variables, which are described further below.

Board characteristics

Board independence

Board independence (BIND) was determined as the proportion of independent directors in the boardroom to the total number of directors. Outside investors appreciate a company with a high number of non-executive directors since it indicates transparency and accountability in the management of the company. As a result, such enterprises can obtain funding from the capital market on more favourable terms. Some empirical studies (for example, Bokpin and Arko (2009) and AlNodel and Hussainey (2010) find a positive association between board independence and debt ratio. On the contrary, some studies (Anderson et al., 2004) provided evidence that supported the existence of an inverse connection between board independence and capital structure.

Board size

To begin, board size (BSIZE) denotes the total number of person placed on the board (Zaid et al., 2020a; Saleh et al., 2020). Prior empirical investigations found a conflicting association between board size and capital structure decisions. In the conclusion of Abor (2007), board size positively impacts the choice of financing employed by enterprises. Similarly, Bokpin and Arko (2009), Berger et. al. (1997) and Vakilifard et. al., (2011) discovered a negative relationship between capital structure and board size.

Board Gender Diversity

The proportion of female directors on the board is generally used to calculate gender diversity (Fuente et al., 2017). A well-diversed board along gender line is envisaged to promote the use of a more conservative debt level in the capital mix, which is projected to maximize the total value of the company (Usman et al., 2020a).

Furthermore, a review of previous literature clearly established the availability of a range of firm-specific characteristics that influence business capital structure (Bokpin and Arko, 2009b; Chow et al., 2018). In furtherance of part of the purposes of this study, which is to examine the effect of entity-unique characteristics on financing decisions of Ghanaian listed enterprises, the researchers considered many firm-related factors necessary to avoid possible model misspecification. This research work relied on entity-related features that have been extensively documented in extant literature (Frank & Goyal, 2009; Rajan & Zingales, 1995). These are described in detail in Table 1:

Table 1 Data source and variable measurement summary

Variable	Symbol	Measurement	Expected Sign
Dependent Variable			
Leverage	CAP	Ratio of total debt to total assets	
Independent variable			
Board size	BSIZE	Number of directors on the board	+/-
Board independence	BIND	Ratio of non-executive directors to the total number of directors on the board	+/-
Board Gender diversity	GEND	Ratio of female directors to the total number of directors on the board	-
Audit reputation	AUDR	Examine the reputation for firm	+
Firm size	FSIZE	Total assets of the firm	+
Age	FAGE	Age of firm from incorporation	+/-
Assets Tangibility	TANG	ratio of fixed assets to total assets	+/-
Profitability	ROA	net income to total assets	-
Asset Growth	AGROW	percentage change in the size of total assets	+/-

Estimation Techniques

Initially, the study used Prais-Winsten regression and correlated panels corrected standard errors (PCSEs) estimators. Where the disturbances within linear cross-sectional time series models are believed to be heteroscedastic and contemporaneously correlated across panels, PCSEs are deemed an effective and appropriate estimator to deploy. The study also used an implementable version of the Driscoll-Kraay standard error estimator to guarantee the validity, robustness, and consistency of the results as well.

Regression model specification

This study makes use of a multivariate regression methodology to analyze cross-sectional and time-series data. The model's general form is as follows:

$$CAP_{it} = \alpha + \beta_1 BS_{it} + \beta_2 FC_{it} + \eta_i + V_t + \varepsilon_{it} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots..\text{(1)}$$

The model's dependent variable, CAP_{it}, is represented by the left-hand variable, which is the firm's debt ratio. BS is a vector of board structure variables; η_i is the firm-fixed effects, which are included in the model to control for unobservable firm-specific and time-invariant heterogeneity; FC_{it} is a vector of firm specific characteristics; and v_t denotes time-fixed effects, added to the model as a control for unknown time-invariant effects for all entities that are part of the sample chosen and ε_{it} denotes the error term. The subscript i denotes the cross-sectional dimension, while *t* is the time series dimension.
In its expanded form, equation (1) is specified as:

$$CAP_{it} = \beta_0 + \beta_1 BSIZE_{it} + \beta_2 BIND_{it} + \beta_3 GEND_{it} + \beta_4 AUDR_{it} + \beta_5 FSIZE_{it} +$$
$$\beta_6 LAGE_{it} + \beta_7 TANG_{it} + \beta_8 ROA_{it} + \beta_9 AGROW_{it} + \varepsilon_{it} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots..\text{(2)}$$

where,

CAP_{it} = ratio of total debt to total assets for firm i in time t

$BSIZE_i$ = Number of directors for firm i in time t

$BIND_{it}$ = Ratio of non-executive members on the board for firm i in time t

$GEND_{it}$ =Ratio of women membership of the board for firm i in time t

$AUDR_{it}$ =Audit reputation for firm i in time t dummy variable is denoted 1 when entity is audited by a big 4 and 0 when it is not audited by a big 4.

$FSIZE_{it}$ = the size of the firm (log of total assets) for firm i in time t

$LAGE_{it}$ = logged age of firm i in time t

$TANG_{it}$ = ratio of fixed assets to total assets for firm i in time t

ROA_{it} = percentage of net income to total assets of firm i in time t

$AGROW_{it}$ = percentage change in the size of total assets of firm i in time t

Subscripts i and t denote the country's cross-sections and time, respectively. B_1-$β_9$ are the coefficients to be estimated, $β_0$ is the intercept of the model, and $ε_{it}$ denotes error term.

Presentation of Results

Descriptive statistics

Table 2.0 reports average values for all the variables; the maximum and minimum observed values of each variable; and the standard deviation of each indicator, a measure of the degree of variability in observed values around the mean of the distribution. The average leverage ratio of the firms listed on the GSE used in this study is 0.634. This indicates that almost two-thirds of the firms listed on the GSE adopt debt as part of their capital mix.

Table 2.0 Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
CAP	212	0.634	0.255	0.046	1.433
SIZE	212	11.968	2.435	6.75	16.398
LAGE	216	3.611	0.589	1.099	4.812
TANG	211	0.346	0.281	-0.092	.927
ROA	212	4.873	12.037	-51.73	44.76
AGROW	188	0.253	0.381	-0.532	2.695
BSIZE	216	8.083	2.454	4	13
BIND	216	0.729	0.164	0.4	1
GEND	216	0.409	0.93	0	4.8
AUDR	216	0.708	0.456	0	1

NB: CAP is the ratio of total debt to total assets. Size denotes the total assets of a firm; LAGE denote log of age of firm; TANG denotes the fixed asset to total asset ratio. ROA is the ratio of net income to total assets. AGROWTH denotes a percentage change in the size of total assets; BIND denotes the ratio of non-executive directors on the board; BSIZE denotes the number of directors on the board; The ratio of female directors on the board is denoted by GEND.AUDR denotes the audit reputation for firm.

Debt finance accounts for approximately 63 percent of total assets of entities registered on the GSE, while equity accounts for 37 percent. The leverage ratio also had a volatility (standard deviation of 0.255). The number of directors on the boards of the listed companies ranges from 4 to 13, with an average of 8 directors. The ratio of outside board members to the overall figure for board membership is approximately 73%. The average ratio of female directors to board size (gender diversity) was 0.409.

Matrix of Pairwise Correlations

The correlation matrix as a starting point offers some evidence about the direct relationship between the dependent variable and each of the independent variables and the relationship between each pair of independent variables. Reading from Table 3, the independent variable, leverage, has a negative correlation with firm age (-0.034), firm tangibility (-0.428), profitability (-0.391), board independence (-0.156) and audit reputation (-0.135). The correlation coefficients show that the degree of relationship between most of the variables is weak. Thus, the presence of multi-collinearity associated with each pair of independent variables is low.

Table 3 Correlation Matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) CAP	1.00									
(2) SIZE	0.35	1.00								
(3) LAGE	-0.03	0.25	1.00							
(4) TANG	-0.43	-0.44	-0.24	1.00						
(5) ROA	-0.39	0.14	0.09	-0.06	1.00					
(6) AGROWTH	0.02	-0.01	-0.26	0.08	0.18	1.00				
(7) BSIZE	0.48	0.74	0.06	-0.43	-0.04	-0.04	1.00			
(8) BIND	-0.16	0.46	0.11	-0.35	-0.05	-0.05	0.57	1.00		
(9) GEND	0.19	0.28	0.40	-0.25	0.02	-0.04	0.01	-0.18	1.00	
(10) AUDR	-0.14	0.56	0.51	-0.26	0.21	-0.12	0.28	0.31	0.11	1.00

NB: CAP is the ratio of total debt to total assets. Size denotes the total assets of a firm; LAGE denote log of age of firm; TANG denotes the fixed asset to total asset ratio. ROA is the ratio of net income to total assets. AGROWTH denotes a percentage change in the size of total assets; BIND denotes the ratio of non-executive directors on the board; BSIZE denotes the number of directors on the board; The ratio of female directors on the board is denoted by GEND.AUDR denotes the audit reputation for firm

Multivariate regression analysis results

The study investigated the relationship between board characteristics, entity-specific characteristics, and capital structure using a panel data analytic technique. This study adopted the panel corrected standard errors (PCSE) estimator, which is reliably suited to small panels like this study and accounts for finite sample bias while producing panel-corrected standard errors that allow heteroscedasticity (Beck & Katz, 1995), which the Ordinary Least Square (OLS) does not. Moreover, if the data exhibits evidence of heteroscedasticity and autocorrelation, then the PCSE becomes suitable. A chi-square test conducted produced a value of 4.56, prob > chi2 =0.0327 shows a significant presence of heteroscedasticity. Also, the Wooldridge test for autocorrelation or serial correlation in panel data strongly rejects the null hypothesis of no first order autocorrelation (See Table 4). The above evidence in the nature of the data provides the necessary justification for the use of the PCSE estimation approach.

Table 4. Regression Results: Prais-Winsten regression, correlated panels corrected standard errors (PCSEs). Dependent Variable, CAP

	(1) (CAP)	(2) (CAP)	(3) (CAP)	(4) (CAP)	(5) (CAP)
BIND	-0.19*		-0.135		
	(0.103)		(0.117)		
BSIZE	0.04***	0.032***			
	(0.015)	(0.012)			
GEND	0.023*			0.035**	
	(0.013)			(0.017)	
AUDR	-0.197***				-0.234***
	(0.065)				(0.074)
SIZE	0.023	0.009	0.036***	0.03***	0.05***
	(0.015)	(0.014)	(0.007)	(0.008)	(0.007)
LAGE	0.015	-0.036	-0.053	-0.072*	0.015
	(0.037)	(0.037)	(0.037)	(0.043)	(0.028)
TANG	-0.207***	-0.221***	-0.246***	-0.231***	-0.237***
	(0.065)	(0.059)	(0.07)	(0.066)	(0.063)
ROA	-0.006***	-.0006***	-0.006***	-0.006***	-0.006***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
AGROWTH	0.066***	0.068***	0.064***	0.063**	0.062***
	(0.021)	(0.023)	(0.024)	(0.025)	(0.023)
_cons	0.329*	0.483***	0.591**	0.611***	0.234*
	(0.19)	(0.162)	(0.233)	(0.208)	(0.137)
Observations	187	187	187	187	187
R-squared	0.619	0.57	0.57	0.57	0.60

Wooldridge's test for autocorrelation
  $F(1,23)=44.940$, Prob>F=0.00

Standard errors are in parentheses.
*** $p<.01$, ** $p<.05$, * $p<.1$

NB: where, CAP denotes ratio of total debt to total assets; Size denotes total assets of firm; LAGE denote log of age of firm; TANG denotes ratio of fixed assets to total assets; ROA denotes net income to total assets; AGROWTH denotes percentage of change in the size of total assets; BSIZE denotes number of directors on the board; BIND denotes Ratio of non-executive directors on the board; GEND denotes Ratio of female directors on the board; AUDR denotes Audit reputation for firm.

Table 4 summarizes the PCSEs regression results. Five regressions were done in all. Initially, the study ran a model that included all of the explanatory variables in order to determine the combined influence of business characteristics and corporate governance traits on the financing mix decisions of the listed firms. Holding constant, the five firm-specific factors used in this study, we conduct four more regressions, each incorporating only one of the board variables at a time. The rationale is to establish the level of impact of each board variable on the capital structure in the absence of the other board variables and to determine the level of consistency of the outcome of the multivariate regression analysis.

Discussion of Empirical Results

Corporate Governance Characteristics and Capital Structure Nexus

A cursory observation of the descriptive analysis indicates that female representation on the boards of listed enterprises in Ghana was around 41% during the 9-year study period. Also, listed firms scored high in terms of audit reputation, recording an average value of 70%, implying that, listed firms on the Ghanaian bourse actively engage the audit services of the top four international audit firms. With respect to the corporate governance characteristics in the regression analysis, the positive and significant coefficient of board size from Table 4 shows

that a fat-numbered governing board of directors provides a greater debt borrowing and utilization opportunity in the funding mix. Thus, for listed firms in Ghana, a large board size gives them broader networks of expertise and interactions, including those with outside affiliates, creating the desired public image and prospects for them to easily access external debt funding. Perhaps, large board sizes of firms are more entrenched, more consultative, and more likely to deploy strict supervision in the financing decision-making process and as a result, they are likely to adopt a high debt financing strategy to enhance the firm's value. Therefore, this finding may also imply that companies with large board membership tends to pursue high borrowing strategies in order to increase the company's worth. The conclusion of this study on board size and capital structure relationship is confirmed by scholars like Usman et al. (2020b) and Berger et al. (1997).

Also, the beta coefficient of gender diversity, which focused on women's participation in the governance of publicly traded companies in Ghana, is found to be positive. This implies that corporate boards with more female representation are likely to have more access to and use of debt in financing their assets. Therefore, as the share of female board members on the board increases, so will a corporation's debt level also increase. This finding could be linked to the fact that listed entities with significant female board members are not only diversified along gender lines but also enjoy a variety set of skills, knowledge, networks and ideas that can be harnessed in the boardroom to create optimal firm value, which may seem attractive to lenders in the financial market. Seasoned female business executives are fast emerging, and there is a global push for unbiased gender distribution in business leadership. Fair representation of females on the governance board is viewed as a positive addition to the image of listed entities and should promote board effectiveness and easy access to financing. This observation aligns with that of Adam and Ferriera's (2009) findings.

According to Abbott and Parker (2000), the selection of external auditors is crucial in determining audit quality, which will ultimately affect the cost of capital. A significant coefficient, which is also negative for audit reputation in this study, indicates that Ghanaian listed companies audited by the top four audit firms favour a conservative financial leverage structure. The findings are in direct contrast to the study's theory and expectations. Corporations audited by the top four audit firms are supposed to attract lower financing costs (cost of debt) because they are perceived to be more transparent and accountable to their investors. As a result, Abad et al. (2017) demonstrate that when one of the big four audit firms audits financial statements, information asymmetry between managers and investors is reduced. Hence, investors can expect higher future earnings on their investments.

Nevertheless, the negative link between audit reputation and capital structure found in this study suggests that good reputation may not be adequately represented by the audit work of Ghana's top four audit firms and may not be an appropriate representation of audit quality. The recent collapse of UT Bank in Ghana due to erosion of its capital, among other infractions, and subsequent delisting from the Ghana Stock Exchange in 2017, is a reminder of the limitation of audit reports of the top 4 as a gauge of the financial soundness of listed firms in Ghana. Siregar and Utama (2008) arrived at a similar conclusion in a study conducted in Indonesia, covering listed firms on the Indonesian bourse. The researchers, in their conclusion, proposed audit fees and audit hours as more appropriate indicators for audit quality.

Firm Specific-Characteristics and Capital Structure

Again, in all the five regression results, firm size reported a positive and significant association with capital structure. Thus, the larger a firm's size, the greater the firm's financial decisions tend to favour debt issuance to finance its assets. In other words, larger corporations use more debt in their financing decisions than smaller firms. A plausible explanation for this discovery is that larger enterprises have several sources of revenue, which may be uncorrelated, and therefore should suffer low earnings variance, allowing these entities to procure and sustain higher debt levels. Debt providers are comfortable lending to bigger enterprises since they are regarded as less risky. Smaller enterprises, however, have to contend with issues of information asymmetry, resulting in high borrowing costs and low gearing levels. This finding is consistent with the existing body of knowledge and empirical evidence, such as those of Abor (2007) and Hall et al. (2004) but runs in opposition to the position of Michaelas et al. (1999).

Moreover, the study observed a negative and significant relation between asset tangibility and capital structure, indicative of the fact that listed firms in Ghana with huge tangible assets are averse to loan finance. This may be since, the high inflation rate in Ghana not only makes borrowing expensive but also allows the value of enterprises' assets to be easily eroded, making it unattractive to lenders of debt. Furthermore, in the event of default, the legal procedure of converting illiquid tangible assets to cash and near-cash assets is time-consuming and leads to a considerable reduction in the value of collateralized tangible assets. Contrary to the findings of this study, empirical findings from developed countries by Rajan and Zingales (1995) and Titman and Wessels (1988) show a positive association between asset tangibility and capital mix under the trade-off theory. However, the negative association between capital structure and asset tangibility observed in10 developing nations by Booth et al. (2001), Bauer (2004), and Mazur (2007) refutes these findings but falls in line with the current study.

With respect to a firm's profitability, the evidence from this study shows that the coefficients of profitability are negative and significant in the relationship between capital structure and profitability. This shows that profitable listed Ghanaian firms tend to depend more on internally generated sources of finance and borrow less debt. While profitable organizations can easily access debt financing relative to less profitable firms, profitable entities may still have a low demand for debt financing. This is because, profitable entities can fall back on retained earnings to fund new projects as well as existing projects. This finding is compatible with the Pecking Order Theory. Most empirics, including Barton et al. (1989); Friend and Lang (1988); Jordan et al (1998) arrived at similar conclusions to this study.

The growth rate of firms, as determined by the change in a firm's total assets, has a positive relationship with financing decisions. The positive relationship was stable across all regressions and statistically significant at 5%. This suggests that managers of listed companies with high growth opportunities tend to favour debt finance more than other sources of capital in their funding mix. This is because debt lenders prefer enterprises with good growth prospects since they are more likely to meet their loan obligations with sustainable future earnings. Furthermore, high-growth enterprises must fund capital projects arising from their growth prospects, and as a result, they are more aggressive in the debt market. Corporations with great growth potential cannot continue to rely solely on internal funds to raise capital, even in the face of increasing bankruptcy costs (Fama and French, 2002). The findings from the current study are consistent with the trade-off theory, which predicts a positive relationship between growth and capital structure. Abor (2007), Kuo et al. (2012), Haque et al. (2011); Barton et al.,

1989, and Titman and Wessels (1988) are a few researchers who also discovered positive correlations between growth and leverage.

Robustness Check

A robustness check is a common exercise in empirical studies in which the researcher analyzes how certain basic regression coefficient estimations behave when the regression specification is modified by adding or removing some regressors or using another estimating approach. If the coefficients are credible and resilient, this is typically viewed as evidence of structural validity. Table 5 shows the results of a robustness assessment using a Driscoll-Kraay standard error estimator to address technical issues related to cross-sectional and temporal dependence in the data.

Table 5 Driscoll-Kraay standard errors

	(1) CAP	(2) CAP	(3) CAP	(4) CAP	(5) CAP
SIZE	0.033***	0.014	0.038***	0.03***	0.052***
	(0.009)	(0.009)	(0.004)	(0.005)	(0.004)
LAGE	-0.013	-0.063***	-0.078***	-0.099***	-0.006
	(0.01)	(0.015)	(0.015)	(0.015)	(0.008)
TANG	-0.285***	-0.283***	-0.338***	-0.302***	-0.301***
	(0.015)	(0.017)	(0.031)	(0.027)	(0.022)
ROA	-0.008***	-0.008***	-0.009***	-0.008***	-0.008***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)
AGROWTH	0.022	0.034*	0.029	0.023	0.021
	(0.013)	(0.016)	(0.023)	(0.022)	(0.018)
BSIZE	0.029**	0.024**			
	(0.009)	(0.007)			
BIND	-0.224***		-0.222***		
	(0.061)		(0.042)		
GEND	0.016***			0.036***	
	(0.004)			(0.006)	
AUDR	-0.196***				-0.236***
	(0.026)				(0.036)
_cons	0.48***	0.626***	0.773***	0.758***	0.328***
	(0.066)	(0.053)	(0.103)	(0.088)	(0.043)
Observations	187	187	187	187	187
R-squared	0.538	0.43	0.423	0.422	0.506

Standard errors are in parentheses. **NB:** where, CAP denotes ratio of total debt to total assets; Size denotes total assets of firm; LAGE denote log of age of firm; TANG denotes ratio of fixed assets to total assets; ROA denotes net income to total assets; AGROWTH denotes percentage of change in the size of total assets; BSIZE denotes number of directors on the board; BIND denotes Ratio of non-executive directors on the board; GEND denotes Ratio of female directors on the board; AUDR denotes Audit reputation for firm. *** $p<.01$, ** $p<.05$, * $p<.1$

Again, the Driscoll-Kraay standard errors are known to be robust to heteroscedasticity and autocorrelation (Driscoll & Kraay, 1998), in contrast to ordinary least squares, which produce biased and inconsistent estimates. Olaoye and Aderajo (2020), Hashemizadeh et al. (2021), and Olaoye et al. (2020), used Driscoll and Kraay's nonparametric covariance matrix tool to tackle issues of cross-section dependency, spatial dependence, and cross-country heterogeneity, all of which are important in empirical modeling. A cursory look at the regression results of Prais-Winsten correlated panels corrected standard errors (PCSEs) in Table 4 and the Driscoll-Kraay standard errors outcome in Table 5 revealed a high degree of consistency. The findings of this study are therefore robust and consistent.

Conclusions and Policy Implications

This study used a panel data analytic approach to empirically explore the relationship between some unique attributes of corporate governance, entity-specific attributes, and financial mix decisions of companies registered on the Ghana Stock Exchange. Using board size, board independence, board gender diversity, and board audit reputation as corporate governance features alongside firm-specific characteristics, the empirical findings show that listed firms on the Ghana Stock Market embrace high debt finance with more female representation on the board of directors and large board size, whereas those firms with a high number of outside directors on the board prefer less debt finance. The issue of gender representation and involvement in corporate decision making is further given the needed impetus in debate by the findings of this study. Given that financial institutions in Ghana largely dominate the financial landscape compared to other sources of finance like equity, financially constrained firms can enhance their corporate image with more female representation and board members. These measures are likely to enhance transparency and accountability in the eyes of investors and debt suppliers as well, thereby making debt financing relatively cheaper and accessible. Moreover, boards of fat-numbered and effective firms reduce information asymmetry between the firm and providers of financial assistance. Thus, increasing the board size with the right skill set of directors may affect the firm positively in its dealings with all stakeholders.

Not only do corporate governance characteristics matter in the capital structure decisions of firm but also unique firm-specific features have been found to be essential in the capital structure decisions of firms. In the first place, profitable firms and firms with a high proportion of fixed asset in their assets structure access less debt financing. Efficient cost management with the aim of creating more tangible assets is a good management strategy that will likely enable the firm to access debt finance.

In terms of policy implications, listed firms are encouraged to bridge their asymmetric information gap in the financial market by including more females on their boards of directors, which may increase board independence and access to funding in Ghanaian financial markets. Moreover, the regulators of the Ghanaian Stock Market must begin to engage the listed and prospective firms as part of the listing and regulatory requirements to have females on their boards of directors. Gender equality on the board may foster rich financial decisions based on a varied collection of skills, knowledge, and ideas.

Furthermore, registered entities on the Ghanaian bourse are encouraged to continue and actively engage the services of the top four international audit firms because reputation is an important factor that lenders consider when evaluating viable opportunities and deciding whether to provide capital to corporate entities or not. More significantly, stakeholders such as shareholders, the Securities and Exchange Commission, and the Ghana Stock Exchange must prioritize quality audits and develop a framework that ensures audit recommendations reflect the reality of Ghanaian listed firms' reports. With respect to firm-specific issues, management and the board of directors must be weary of the fact that firm-specific features are informative and have a signaling effect on relevant interest groups, particularly capital providers. Managers of publicly traded companies, in particular, must ensure the profitability and growth of their operations in order to secure additional leverage in the financial market, while also keeping a close eye on the tangibility of their assets in order to improve their financing decisions.

References

Abad-Diaz, David & Sánchez-Ballesta, Juan & Yagüe, José. (2017). Audit opinions and information asymmetry in the stock market. *Accounting & Finance*. 57. 565-595. 10.1111/acfi.12175.

Abbott, L.J., Park, Y. and Parker, S. (2000). The effects of audit committee activity and independence on corporate fraud. *Managerial Finance*, Vol. 26 No. 11, pp. 55-68. https://doi.org/10.1108/03074350010766990.

Abor, J. (2007). Corporate governance and financing decisions of Ghanaian listed firms. *Corporate Governance*, 7(1), 83 - 92.

Abor, J., & Biekpe, N. (2012). Corporate governance, ownership structure and performance of SMEs in Ghana: implications for financing opportunities. *Corporate governance*, 7(3), 288-300.

Adams, B.R. & Farreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics, 94(1), 291-309.*

Akhtar. S. (2005). The Determinants of Capital Structure for Australian Multinational and Domestic Corporations, *Australian Journal of Management,* Vol.30, No.2, 321-341.

Aebi, V., Sabato, G., & Schmid, M. (2012). Risk management, corporate governance, and Bank performance in the financial crisis. Journal of Banking and Finance, 36(12), 3213–3226.

Agrawal, A. and Nagarajan, N. (1990), "Corporate capital structure, agency costs and ownership control: the case of all-equity firms", *Journal of Finance*, Vol. 45 No. 4, pp. 1325-1331

Ahmed, S., N. & Wang, Z. (2012). Effects of Corporate Governance on Capital Structure: Empirical Evidence from Pakistan. Corporate Governance: *The International Journal of Business In Society*, 12, 629-641.

Al-Fayoumi, N.A. and Abuzayed, B.M. (2009), "Ownership structure and corporate financing", *Applied Financial Economics*, Vol. 19 No. 24, pp. 1975-1986

Al-Sakran, S.A. (2001). "Leverage determinants in the absence of corporate tax system: The case of non-financial publicly traded corporations in Saudi Arabia". *Managerial Finance,* 27(10/11): 58-86.

AlNodel, A., & Hussainey, K. (2010). Corporate governance and financing decisions by Saudi companies. *Journal of Modern Accounting and Auditing, 6(8) (63), 1- 14.*

Anderson, R.C., Mansi, S.A., & Reeb, D.M. (2004). Board characteristics, accounting report integrity, and the cost of debt. *Journal of Accounting and Economics*, 37, 315-42.

Barnea, A., R.A. Haugen and L.W. Senbet. (1980). "A rationale for debt maturity and call provision in the agency theoretic framework". *The Journal of Finance*, 35(5): 1223–34.

Barton, S.L., C.H. Ned and Sundaram. S. (1989). "An empirical test of stakeholder theory predictions of capital". *Financial Management*, 18(1): 36–44.

Bauer, P. (2004). Determinants of capital structure: Empirical evidence from the Czech Republic. Czech. *Journal of Economics and Finance*, 54(1), 1-21.

Beck, Thorsten, AsliDemirguc-Kunt. (2006). Small and medium-size business- Access to finance as a growth constraint. *Journal of Banking and Finance*, volume 30: 2931-2943

Bharath, S.T., Pasquariello, P. and Wu, G. (2009), "Does asymmetric information drive capital structure decisions?", *Review of Financial Studies*, Vol. 22 No. 8, pp. 3211-3243.

Beck, N. & Katz, J.N. (1995). What to do (and not to do) with Time-Series Cross-Section Data. *American Political Science Review*. 89, 634–647.

Beck, T. and Demirguc-Kunt, A. 2006, 'Small and medium-size enterprises: Access to finance as a growth constraint', Journal of Banking and Finance 30, 2931–2943.

Berens, J.L. & Cuny, C.L. (1995), "The capital structure puzzle revisited", *Review of Financial Studies*, Vol. 8 No. 4, pp. 1185-1208.

Berger, P. G., Ofek, E., & Yermack, D. L. (1997). Managerial entrenchment and capital structure decisions. *Journal of Finance*, 52, 1411-1438. https://doi.org/10.1111/j.1540-6261.1997.tb01115.x

Booth, L., Aivazian, V., Demirguc-Kunt, A. and Maksimovic, V. (2001), ''Capital structures in developing countries'', *Journal of Finance*, Vol. 1, pp. 87-130.

Brailsford, T. J., Oliver, B. R., & Pua, S. L. (2002). On the relation between ownership structure and capital structure. *Accounting and Finance*, 42(1), 1-26. https://doi.org/10.1111/1467-629X.00001.

Brealey R., Myers S.C., Allen F. (2006). Principles of Corporate Finance, McGraw Hill Irwin, New York NY, 8th ed.

Bokpin, A. G., & Arko A.C. (2009). Corporate Governance and capital structure decisions of firms: Empirical evidence from Ghana. *Studies in Economies and Finance*, 26(4), 246 - 256.

Boubakari, A., & Feudjo, J. R. (2010), Corporate governance for the best financing choices: An Empirical Study from Family Firms in Northern Cameroon. *International Journal of Economics and Finance*, 2(2), 70-77.

Cassar, G. and S. Holmes. (2003). "Capital structure and financing of SMEs: Australian evidence". *Journal of Accounting and Finance*, 43: 123–47.

Chen, J. J. (2004). Determinants of capital structure of Chinese listed companies. *Journal of Business Research*, 57(12), 1341–1351.

Chen, H. L., & Hsu, W. T. (2009). Family ownership, board independence, and R&D investment. *Family Business Review*, **22**(4), 347– 362.

Chiang, Y.H., Cheng, E.W.L. and Lam, P.T.I. (2010), "Epistemology of capital structure decisions by building contractors in Hong Kong", *Construction Innovation*, Vol. 10 No. 3, pp. 329-345.

Chittenden, F., G. Hall and P. Hutchinson. (1996). "Small firm growth, access to capital markets and financial structure: Review of issues and an empirical investigation". *Small Business Economics*, 8: 59–67.

Chow, Y. P., Muhammad, J., Bany-Ariffin, A. N., Cheng, F. F. (2018). Macroeconomic uncertainty, corporate governance and corporate capital structure. *International Journal of Managerial Finance*, 14(3), 301–321.

Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of Management*, 16, 49–64. http://dx.doi.org/10.1177/031289629101600103.

Driscoll, J. C., and A. C. Kraay. (1998). Consistent Covariance Matrix Estimation with Spatially Dependent Panel Data. *Review of Economics and Statistics*, 80: pp.549–560.

Du, J. and Dai, Y. (2005), "Ultimate corporate ownership structures: evidence from East Asian economies", *Corporate Governance*, Vol. 13 No. 1, pp. 60-71.

El-Sayed Ebaid, I. (2009), "The impact of capital-structure choice on firm performance: empirical evidence from Egypt", *The Journal of Risk Finance*, Vol. 10 No. 5, pp. 477-487.

Eriotis, N., Vasiliou, D., & Ventoura-Neokosmidi, Z. (2007). How firm characteristics affect capital structure: An empirical study. *Managerial Finance,* 33, 321–331. http://dx.doi.org/10.1108/03074350710739605.

Ezeoha, A.E. (2011), "Firm versus industry financing structures in Nigeria", *African Journal of Economic and Management Studies*, Vol. 2 No. 1, pp. 42-55

Esperança, J.P., P.M.G. Ana and A.G. Mohamed (2003). "Corporate debt policy of small firms: An empirical (re)examination". *Journal of Small Business and Enterprise Development*, 10(1): 62–80.

Faccio, M, Lang, L. H. P., & Young, L. (2010). Pyramiding vs leverage in corporate groups: International evidence. *Journal of International Business Studies,* 41(1), 88-104. https://doi.org/10.1057/jibs.2009.33.

Faccio, M., Marchica, M.T., Mura, R., (2016). CEO gender, corporate risk-taking, and the efficiency of capital allocation, Journal of Corporate Finance 39, 193-209.

Fama, E. F., & French, K. R. (2002). Testing trade-off and pecking order predictions about dividends and debt. *The Review of Financial Studies*, 15(1), 1–33.

Frank, M.Z. & Goyal, V.K. (2003). Capital Structure Decisions, AFA San Diego Meetings 2003, http://ssrn.com/abstract=396020.

Frank, M.Z. & Goyal, V. (2009). Capital Structure Decisions: Which Factors Are Reliably Important? *Financial Management*, 38(1), pp.1-37.

Friend, I., & Lang, L. H. (1988). An empirical test of the impact of managerial self-interest on corporate capital structure. *The Journal of Finance*, 43(2), 271–281.

Fuente, J.A., Garcı́a-Sanchez, I.M. and Lozano, M.B. (2017), "The role of the board of directors in the adoption of GRI guidelines for the disclosure of CSR information", *Journal of Cleaner Production*, Vol. 141, pp. 737-750.

Graham, J. R. and C. Harvey (2001). "The Theory and Practice of Corporate Finance: Evidence from the Field." Journal of Financial Economics 60: 187-243

Green, C.J. Murinde, V. and Suppakitjarak, J., (2002), "Corporate financial structures in India", Finance and Development Research Programme Working Paper, No. 43, May

Grossman, S.F., Hart. O., (1982). Corporate financial structure and managerial incentives, in: J.J. McCall (ed.), The economics of information and uncertainty, University of Chicago Press, Chicago, 1982

Hall, G.C., P.J. Hutchinson and N. Michaelas (2004). "Determinants of the capital structures of European SMEs". *Journal of Business Finance and Accounting*, 31(5/6): 711–28.

Haque, Faizul, Thankom Gopinath Arun, and Colin Kirkpatrick (2011). Corporate Governance and Capital Structure in Developing Countries: A Case study of Bangladesh. *Applied Economics,* 43: 673–81.

Harel, G.H., Tzafrir, S.S., Baruch, Y., (2003). Achieving organizational effectiveness through promotion of women into managerial positions: HRM practice focus. International Journal of Human Resource Management. 14 (2), 247-263.

Harris, M., Raviv. A. (1991). The Theory of Capital Structure, *Journal of Finance*, Vol.46, No.1, 297-355.

Hashemizadeh, A., Bui, Q., & Kongbuamai, N. (2021). Unpacking the role of public debt in renewable energy consumption: New insights from the emerging countries. *Energy, 224*, 120187.

Helfat, C. E., D. Harris and P. J. Wolfson, (2006), "The pipeline to the top: Women and men in the top executive ranks of U.S. corporations". Academy of Management Perspectives, 20(4): 42-64

Hoffman, L. R. and N. Marier, (1961), "Quality and acceptance of problem solutions by members of homogeneous and heterogeneous groups". Journal of Abnormal and Social Psychology, 62: 401-407

Hovakimian, A., Hovakimian, G. and Tehranian, H. (2004), "Determinants of target capital structure: the case of dual debt and equity issues", *Journal of Financial Economics*, Vol. 71 No. 2, pp. 517-540.

Huang, G., & Song, F. M. (2006). The determinants of capital structure, evidence from China. *China Economic Review*, 17, 14-36. https://doi.org/10.1016/j.chieco.2005.02.007.

Jensen, M. & Meckling, W. (1976). Theory of the firm, managerial behaviour, agency costs, and capital structure. *Journal of Financial Economics*, 3(4), 305–360.

Jensen, M.C. (1986), "Agency costs of free cash flow, corporate finance, and takeovers", The *American Economic Review*, Vol. 76 No. 2, pp. 323-329.

Jong, A.D., Kabir, R. and Nguyen, T.T. (2008), "Capital structure around the world: the roles of firm-and country-specific determinants", *Journal of Banking & Finance*, Vol. 32 No. 9, pp. 1954-1969

Jordan, J., J. Lowe, and Taylor P. (1998). "Strategy and financial policy in U.K. small firms". Journal of Business Finance and Accounting, 25(1): 1–27.

Kajananthan, R. (2012). Effect of Corporate Governance on Capital Structure, Case of the Sri Lankan Listed Manufacturing Companies. *Journal of Arts. Sciences & Commerce*, 3(4), 63-71.

Karadeniz, E., Kandir, S.Y., Balcilar, M. and Onal, Y.B. (2009), "Determinants of capital structure: evidence from Turkish lodging companies", *International Journal of Contemporary Hospitality Management*, Vol. 21 No. 5, pp. 594-609

Kester, W.C. (1986). "Capital and ownership structure. A comparison of United States and Japanese manufacturing corporations". *Financial Management*, 15: 5–16.

Kraus, A., & Litzenberger, R. H. (1973). A state-preference model of optimal financial leverage. *The Journal of Finance,* 28(4), 911–922.

Kuo et al., (2012). The influence of international experience on entry mode choice: Difference between family and non-family firms. *European Management Journal*, 30 (2012), pp. 248-263.

Kyereboah-Coleman, A., & Biekpe, N. (2006). Corporate governance and financing choices of firms: a panel data analysis. *South African Journal of Economics,* 74(4), 670-81.

Loden, M., (1985). Feminine leadership, or how to succeed in business without being one of the boys. Times Books, New York.

Margaritis, D. and Psillaki, M. (2007), "Capital structure and firm efficiency", *Journal of Business Finance & Accounting*, Vol. 34 Nos 9/10, pp. 1447-1469

Mazur, K, (2007). The Determinants of Capital Structure Choice: Evidence from Polish Companies, I.nternational Advances in Economic Research, Springer; *International Atlantic Economic Society*, vol. 13(4), pages 495-514, November.

Michaelas, N., F. Chittenden and P. Poutziouris. (1999). Financial policy and capital structure choice in UK SMEs: Empirical evidence from company panel data. *Small Business Economics*, 12: 113–30.

Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *The American Economic Review,* 48(3), 261–297.

Modigliani, F., & Miller, M. H. (1963). Corporate income taxes and the cost of capital: A correction. *The American Economic Review,* 53(3), 433–443.

Myers, S.C., 1977, "Determinants of Corporate Borrowing," *Journal of Financial Economics*, 5, 147-175.

Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics,* 13(2), 187–221.

Nielsen, S., Huse, M., (2010). Women directors' contribution to board decision-making and strategic involvement: the role of equality perception, *European Management Review*. 7 (1), 16---29.

Nkundabanyanga, S. K., Ahiauzu, A., Sejjaaka, S. K., & Ntayi, J. M. (2013). A model for effective board governance in Uganda's services sector firms. *Journal of Accounting in Emerging Economies*, 3, 125–144. http://dx.doi.org/10.1108/20421161311288857.

Noriza, M. S. (2010). Corporate governance compliance and the effects to capital structure in Malaysia. *International Journal of Economics and Finance*, 2, 123–130.

OECD. (2015). Principles of corporate governance OECD (Report to G20 finance ministers and central bank governors meeting). Ankara:

Olaoye, O., & Aderajo, O. (2020). Institutions and economic growth in ECOWAS: an investigation into the hierarchy of institution hypothesis (HIH). *International Journal of Social Economics*, 47 (9), 1081-1108.

Olaoye, O. O., Orisadare, M., Okorie, U. U., & Abanikanda, E. (2020). Re-examining the government expenditure–growth nexus in ECOWAS countries. *Journal of Economic and Administrative Sciences*, 36 (4), 277-301.

Ooi, J. (1999), "The determinants of capital structure: evidence on UK property companies", *Journal of Property Investment & Finance,* Vol. 17 No. 5, pp. 464-480.

Petersen, M.A., Rajan, R.G., (1995). The effect of credit market competition on lending relationships, *Quarterly Journal of Economics*, 110, 407-443.

Pfeffer, J. (1973). Size and composition of corporate boards of directors: The organization and its environment. *Administrative Science Quarterly*, 17, 218–228. http://dx.doi.org/10.2307/2393956.

Rajan, R.G and Zingales, L. (1995). "What do we know about capital structure? Some evidence from international data", *Journal of Finance*, 50, pp.1421-60.

Reinhard, L. and Li, S. (2010), "A note on capital structure target adjustment-Indonesian evidence", *International Journal of Managerial Finance*, Vol. 6 No. 3, pp. 245-259.

Roden, D.M. and W.G. Lewellen. (1995). Corporate capital structure decisions: Evidence from leverage buyouts. *Financial Management*, 24: 76–87.

Ross, S.A. (1977), "The determination of financial structure: the incentive-signaling approach*", The Bell Journal of Economics*, Vol. 8, pp. 23-40.

Sakai, K., Uesugi, I. & Watanabe, T. (2010). Firm age and evolution of borrowing costs: Evidence from Japanese small firms. *Journal of Bank Finance*, 34, 1970-1981.

Saleh, M.W., Latif, R.A, Bakar, F.A & Maigoshi, Z.S. (2020). "The impact of multiple directorships, board characteristics, and ownership on the performance of Palestinian listed companies", *International Journal of Accounting, Auditing and Performance Evaluation,* Vol. 16(1), pp.63-80.

Schicks, J, (2014). "Over-Indebtedness in Microfinance – An Empirical Analysis of Related Factors on the Borrower Level," *World Development*, Vol. 54, pages 301-324.

Schubert, R. (2006), "Analyzing and managing risks – on the importance of gender difference in risk attitudes", Managerial Finance, Vol. 32 No. 9, pp.706-715.

Siregar S., and Siddharta Utama (2008). Type of earnings management and the effect of ownership structure, firm size, and corporate-governance practices: Evidence from Indonesia. *The International Journal of Accounting*. DOI:10.1016/J.INTACC. 2008.01.001.

Stulz, R. (1990). Managerial discretion and optimal financing policies. *Journal of Financial Economics,* 26(1), 3–27.

Tajfel, H., (1981), Human groups and social categories studies in social psychology. Cambridge: Cambridge University Press.

Titman, S, & Wessels, R. (1988). The determinants of capital structure choice. *The Journal of Finance,* 43, (1), 1-19.

Turner, J. C., (1987), Rediscovering the social group: A self-categorization theory. Oxford: Blackwell.

Usman, M., Farooq, M.U., Zhang, J., Makki, M.A.M. & Khan, M.K., (2019). "Female directors and the cost of debt: does gender diversity in the boardroom matter to lenders? *Managerial Auditing Journal,* Vol. 34 (4), pp.374-392.

Van der Wijst, N. and R. Thurik. (1993). "Determinants of small firm debt ratios: An analysis of retail panel data". *Small Business Economics,* 5(1): 55–65.

Vakilifard, H. R., Gerayli, M. S., Yanesari, A. M. & Ma"atoofi, A. R. (2011). Effect of Corporate Governance on Capital Structure: Case of the Iranian Listed Firms. *European Journal of Economics, Finance and Administrative Sciences,* 35, 165 - 172.

Vinnicombe, S., V. Singh, R. Burke, D. Bilimoria and M. Huse, (2008), Women on corporate boards of directors: International research and practice. Cheltenham: Edward Elgar

Wen, Y., Rwegasira, K. & Bilderbeek, J. (2002). Corporate governance and capital structure Decisions of the Chinese listed firms. Corporate Governance: *An International Review*, 10(2), 75-83.

Williams, K. Y. and C. A. O'Reilly, (1998), "Demography and diversity in organizations: A review of 40 years of research". In B.M. Staw and L.L. Cummings (eds) Research in organizational behavior. Greenwich JAI Press

Wiwattanakantang, Y. (1999). An empirical study on the determinants of the capital structure of Thai firms. *Pacific-Basin Finance Journal*, 7, 371 - 403.

Yu, D. and Aquino, R. (2009), "Testing capital structure models on Philippine listed firms", *Applied Economics,* Vol. 41 No. 15, pp. 1973-1990

Zaid, M.A. Abuhijleh, S.T & Pucheta-Martinez, M.C. (2020a). "Ownership structure, stakeholder engagement, and corporate social responsibility policies: the moderating effect of board independence", *Corporate Social Responsibility and Environmental Management,* Vol. 27 (3), pp.1344-1360.

Zaid, M.A., Wang, M., Sara, T.F.A., Ayman, I. Mohammed, W.A.S. & Ali, F. (2020b). Corporate governance practices and capital structure decisions: the moderating effect of gender diversity. *Corporate Governance*, Vol. 20(5), pp.939-964